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A bi-directional communication assembly is provided with commonly available optoelectronic components in a compact package. Diplex functionality is achieved by orienting the receiving detector at an angle with respect to the transmitting beam. An interference coating inside the detector, on the detector surface, or on a surface in intimate contact with the detector, reflects the transmitted beam while simultaneously allowing the receiving beam to pass through the coating to the light absorbing region. The combined function of the receiving detector, providing advantages of a common beam path and close proximity of the components, enable a compact package that can be placed within the space usually occupied by the transmitter light source alone.

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